BRIEFER ARTICLES

OCTAVE LIGNIER

(WITH PORTRAIT)

The subject of this sketch was born at Pangy in Champagne in 1855, and died at the comparatively early age of 61. His studies were carried on at Lille, under BERTRAND, GIARD, and GOSSELET. He received the doctorate later at Paris, but the environment of Lille seems to have exercised a greater influence on his subsequent scientific work. Lacking personal fortune, his life was a perpetual struggle to improve the small initial equipment he found at Caën, where he was made professor in 1887. His scientific achievement, in spite of this handicap, was more notable in the 25 years of his professorial activities (celebrated in January 1913) than usually distinguishes capacity favored by fortune and environment. More than 200 articles emanated from LIGNIER'S laboratories, and his activities covered the important fields of general morphology, anatomy, paleobotany, and plant geography. This wide range of interest was due partially to the fact that at first he had to cover the entire field of botany (including even a large herbarium), for only in later years was it possible to relegate certain curatorial and instructional duties to others. More decisive than necessity in the wide scope of his scientific activities were his untiring energy, capacity, and optimism.

Notable among his paleobotanical studies are those on Cycadofilicales, Bennettitales, Coniferales, etc. In the first group he described an interesting new genus *Mittagia* (resembling *Lagenostoma*), characterized by megasporangia not solitary but in sori, and also by the presence of 4 functional megaspores in each megasporangium.

The author's studies on the fossil floras of Normandy are of importance. In dealing with fossil conifers he did not make the mistake of certain German and English anatomists, in regarding rays as of paramount diagnostic significance. A supposed palm leaf *Propalmophyllum liasanum*, described by our author from the Lias, is according to ZEILLER of very problematical value. From the same geological level LIGNIER described remains of Cordaitales and Calamodendreae, a much later occurrence of these ancient types than has hitherto been recorded.

Important anatomical results reached by the author independently of, but in conformity with, workers on this side of the Atlantic were the conclusion that the herbaceous is derived from the woody type of stem, and that leaves are of great importance in the evolutionary history of plants. He divided vascular plants on the basis of the morphology of the leaf into Phylloideae and Phyllineae. The Phylloideae represent the Lycopsida, with the Equisetales and Sphenophyllales left out. The Phyllineae correspond to the Pteropsida, with the Equisetales and Sphenophyllales added (under the caption of Articulatae). SCOTT has further added to the latter the Psilotaceae and erected them into the phylum Sphenopsida.

LIGNIER'S activities were so numerous and important that it is impossible to do justice to them here. Botanical evolution has suffered a great loss in his death.—E. C. JEFFREY, *Harvard University*.